COMMUNITY FORESTRY IN NEPAL

by

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Community Forestry in Nepal			
Objectives	Incentivizing communities to use forest resources in their vicinity sustainably, encouraging good community governance of natural resources by promoting accountability and transparency, and enhancing equity across genders and ethnic groups. Community forestry also aims to promote biodiversity conservation and forest regeneration.		
Duration	Since the 1970s		
Target area to be restored	1.2 million ha		
Stakeholders and organisation	Local communities in the Middle Hills of Nepal that manage forests through Community Forestry User Groups (CFUGs) working under the overall supervision of the Forest Department.		

1. Background

The success of Nepal's community forestry program stands out among a series of failures in development and governance that have unfortunately plagued this small mountainous landlocked country in the Himalayas over the past five decades. The forests in Nepal were almost exclusively owned by feudal landlords till 1957 when they were nationalized and placed under the control of the State. Forest management became more rule-based but the exclusion of local communities from their management continued as before. The forests on the mountain slopes were degrading and vanishing fast and the Government of Nepal came to the conclusion that the Government Forestry department was not capable of stemming the tide and only an active widespread and deep involvement of local people in forest management had some chances of success.

The process began in the 1970s in the then Kingdom of Nepal that followed a limited but unique grassroots 'Panchayat' democracy under the stern tutelage of the king. That this also provided some political space in governance to the rural marginalized people without threatening the entrenched royalty was also perhaps crucial to the interest that the top most levels in the government took in the initiative, and the Panchayat Forest and Panchayat-protected Forest Rules of 1978 provided the needed legal framework for the program.

Since then the program has been consistently supported by national governments of all political persuasions and by the international community, and today it can claim a well-defined legal and regulatory framework, capable institutions, well laid out policies, plans and

strategies, mechanisms for sharing costs and benefits among communities, and crosssectoral policies that encourage rather than impede effective forest stewardship. This is important for a country with an overwhelming 84 percent of the population living in rural areas with agriculture providing the primary income for 66 percent of them and firewood collection, livestock grazing and collection of non-timber forest products (NTFPs) constituting key subsistence activities, while forests cover just about 40 percent of the country. The contribution of NTFP-related economic activities to a rural household's income can be as high as 90 percent (Bista and Webb 2006). An estimated 7,000 to 27,000 tons of NTFPs valued at USD 7–30 million are annually harvested and traded in Nepal (Olsen, 2005).

From the point of view of ownership and management, the forests of Nepal could be broadly classified as Government owned and managed forests, community managed forests, leasehold forests, private forests and religious forests, the approximate distribution of which is given in the table below. The government directly manages the first two categories of forests totalling about 4.6 million ha and community forestry forms the second largest forest management area covering about 1.2 million ha.

S. No.	Ownership/management category	Extent in ha	
1	Government owned and managed	3,902,273	
2	National and protected forests	711,000	
3	Community managed	1,200,000	
4	Leasehold forests	14,730	
5	Private forests	2,300	
6	Religious forests	ous forests 543	

Source: Asia Forestry Outlook Study 2020: Country Report Nepal, FAO.

Organizing principle

Communal management and utilization of forest resources has a number of key components that include the right of *access* to enter forests and enjoy non-subtractive benefits like passage, right of *withdrawal* of extractable resources from forests, right of *management* of forest for enhancing its utility to the community and regulating its harvest, right of *exclusion* of others from enjoying the forest resource and the right of *alienation* for transferring management and exclusion rights (Agrawal and Ostrom, 2001). These rights can, however, exist only in an environment that allows the resource to first grow only when it can be shared. The sustainability principle is thus ingrained in community rights.

Historically, forests in Nepal were the private feudal property owned by one or the other member of the extended families of the ruling Shah and Rana clans and the community could use the forests only at the pleasure of the owner. There were no recognized rights of people even after nationalization in 1957. The Panchayat Forest and Panchayat-protected Forest Rules of 1978 initiated the process of granting rights of access to forest land and resources as well as the right of exclusion of the communities outside the jurisdiction of the specific Panchayat within which the forests were located. As Nepal's polity changed from absolute monarchy to increased sharing of power with the people more rights were conferred on the forest communities. The first elected parliament after the 1990 movement for democracy enacted the Forest Act in 1993 guaranteeing the rights of local people on forest resources and in forest management. In those days Nepal was the first country in the world that allowed local communities to take full control of government forests (Malla, 1997; Kumar, 2002).

2. Objectives

The primary objectives of community forestry in Nepal are to incentivize communities to use forest resources in their vicinity sustainably, encourage good community governance of natural resources by promoting accountability and transparency, and enhance equity across genders and ethnic groups. Another very important objective is to promote biodiversity conservation in these forests without burdening the communities with increased costs. The conservation and enrichment of the forests must accompany increased earnings and employment for members of the community. A community would be willing to invest its limited resources in forestry only if it generates enough income to support itself and create surpluses for further economic development. Alternatively, the larger society within which the community resides should be willing to pay adequately for the ecological and social goods and services the community generates.

Community Forestry User Groups

Management is through Community Forestry User Groups (CFUGs) numbering about 15,000 spread across the country and working with varying degree of effectiveness in different parts of the country. These CFUGs are the local democratic autonomous institutions working under the overall supervision of the Forest Department that are authorized to manage, consume, and sell forest products from the forests handed over to them by the government. With a view to increase their effectiveness through enhanced capabilities and unity of purpose a formal network of these groups, called the Federation of community Forestry Users Nepal (FECOFUN) has been set up. This federation aims at reducing poverty through sustainable management and utilization of forest resources and emphasizes social consensus in decision making. It promotes the participation of all sections of community and ethnic groups in the composition and working of CFUGs and seeks to incorporate the values of good governance, empowerment, self-respect and self-reliance in the functioning of its constituent members. Membership is voluntary and as of now, 13,528 CFUGs have become members of the FECOFUN (see of these website: www.fecofun.org.np). Besides the CFUGs any other User Group working on forest products is also eligible to become its elementary member.

3. Achievements and Outcomes

Quality of management in community forests

Community forestry has greatly influenced the social, economic, and environmental aspects of rural life and the development of new institutions in Nepal as community members work together to protect existing forests, create new forests, manage them following scientific principles and harvest them. There have been many failures, too, as often the sustainability principle is hard to implement on the very small forest lands that the communities obtain. Forestry practiced at such tiny scales faces a host of very serious challenges including a long wait for flow of returns, market uncertainties and high transaction costs. Important forest management activities like fire and disease control and provision of road and other forms of access to forests have prohibitively high transaction costs when taken up at small scales (Lillandt, 2001) and are best done collectively by an organization empowered and able to enforce regulations which enhances the effectiveness of these measures.

With adequate governmental interventions through the extension services of the forest department, silvicultural management of community forests has improved significantly. In teak plantations in the Terai region of Nepal, active silvicultural management has led to abundant natural regeneration and better growth and is expected to lead to increased revenues from bigger sized teak timber in future. Women groups are also able to collect seeds and raise teak stumps for sale, creating a good flow of income (Yadav et al., 2010). In pine and oak forests also there has been improvement in regeneration and reduction in fires as combustible material lying on the forest floor is effectively removed and in a timely manner. Management of non-timber forest products (NTFPs) follows an operational plan approved by the Divisional Forest Officer in most community forests and is less driven by local traders than in the past. It has also become one of the effective approaches for reintegrating communities marginalized historically due to discrimination on the basis of caste, ethnicity, and gender in the mainstream of development.

But NTFP also poses a major challenge to community forestry in Nepal which has not been adequately addressed. Unlike the reasonably well developed timber markets, the NTFP trade in Nepal, except for a few products with a large local market base like the fruits of *Emblica officinalis* and *Terminalia bellerica,* is still heavily biased against the first level collector in the forests, and heavily tilted in favour of the long chain of traders, with the producers (and collectors) getting extremely low prices even as the final consumer pays exorbitant prices. In addition, rampant adulteration and other clandestine and fraudulent practices result in the consumer not obtaining quality products, thereby further restricting the growth of this highly valuable market. Open access to NTFP and lax control and corruption in regulating agencies contribute to the scale and intractability of the problem.

CFUG as community micro-credit banks

The CFUGs are essentially local voluntary groups promoting rural livelihood using primarily forest resources to which they have access but, in keeping with their objectives, they have also organized themselves to perform other critical rural needs including easy access to credit for personal and small business purposes. Seed money for this purpose has come from their own surpluses as also from donor agencies. Lending is not altogether free of

ethnic and caste biases even when managed through largely democratic processes. There have been conscious attempts to address gender bias in the approval of business loans to women but a limited study found that the mean value of loan granted to men was higher than that for women (Pokharel et al., 2010). The role of these micro-credits in reducing rural poverty is well recognized in Nepal and the CFUGs are encouraged to increase the size of their common funds for enlarging their credit potential. The availability of timber and easy road access in community forests often decides the amount of savings with the CFUGs and their ability to advance loans to their constituents. An over-investment in protection through employment of watchers is frequently noticed, caused more often by distribution of patronage by community leaders rather than stemming from any real need, thus leaving less money to advance as credit (Lund et al., 2010). This also implies relying on overt physical monitoring rather than invisible social policing for protection of common resources.

Sharing of responsibilities with the State

Forests are long term investments that are highly vulnerable to wildfires, grazing, theft and arson besides damage from diseases and insect and pest attacks, drought, floods and storms. Risk mitigation is therefore a critical necessity to make investments in forestry economically viable but their costs can be prohibitively high for cash starved communities. Where public forests are adjacent to community forests the likelihood of spread of fires and pest and diseases from public forests into community forests is quite high and it becomes incumbent on the government to invest adequately in risk mitigation. In the case of grazing, theft and arson prevention is a shared responsibility between the owner and the State. The Government of Nepal is cognizant of this aspect of community forestry but actual progress is limited both by resource crunch as also the present lack of a legitimate political government that has the authority to allocate resources and provide leadership for this purpose.

There are also public expectations (from outside the community) of ecological benefits from community forests but little commensurate willingness to pay for them (Mitchell-Banks, 2001) relying instead on coercive measures like placing restrictions on harvesting limiting the community's rights to enjoy the fruits of its labour. Quite often landslides and similar other damages in hills are blamed on the poor management of community forests leading to demands for control on harvesting. Even when apparently justified the short term advantages of a regulatory approach to such management failures would not balance the illeffects of the community's withdrawal from forest management. The trade-off between livelihood and conservation should remain tilted in favour of livelihood if these forests are to serve the communities that manage them.

Given the feudal history, caste divisions and ethnic disparities that run through Nepalese society, community resources are often cornered by the elite members of communities many of whom do not even live among the community except in name. The fact that a vast majority of community members lack education and organizing abilities, and are too remotely located and thinly spread to attract much attention among the ruling classes emboldens the elites to continue their dominance.

Rural livelihoods in Nepal have benefitted from community forestry but the benefits have remained limited on account of lack of access to relevant technologies and finance. Incentives and subsidies are important first steps but can create dependencies forcing governments to enhance these to unsustainable levels. Creating the right environment and regular evaluation of strategies adopted are important for ensuring transfer of increasingly higher responsibilities to the communities. Lack of human and financial resources combined with poor governance have so far impeded effective intervention by the government. International assistance has contributed much to the development of community forestry in Nepal but the quantum and nature of assistance has not always kept pace with the changing aspirations of the people who are often not satisfied with bare subsistence.

4. Contributions to Climate Change Mitigation and Adaptation

Community forests and climate change

A World Resources Institute study of community forestry across the globe has claimed that when community forests are backed by effective laws and accorded government protection, deforestation rates are "dramatically lower" than in forests outside and that community forestry in Nepal "has generated a carbon stock of more than 180 million tonnes across 1.6 million hectares" (Stevens et al., 2013). Since government records suggest that the total extent of community forests in Nepal is close to 1.2 million hectares this estimate could be an overestimation but no other reliable estimates are currently available.

There is little doubt that at least in the middle elevation region of Nepal community forests have contributed significantly to improved protection of forests. This is evident from the fact that the forests in the middle hills, where community forestry is particularly well established, are relatively stable with negligible losses in the past few years compared to the Terai lowlands and the high mountains bordering Tibet where the deforestation rate is estimated at 2.7 percent (GoN, 2010).

It is in adaptation to climate change, however, that the real value of Nepal's community forestry may express itself. It has prepared a very large section of Nepal's population in the art of sustainable management of its most important natural resource, challenging them to use available technology to regenerate forests where natural regeneration had become rare, and protect against fires, insect attacks and diseases where the government forest department had a rather poor record in the past, while harvesting both timber and non-timber products to bring incomes to the community where the government departments had only earned infamy for corrupt practices. This model is perhaps the only one that addresses adaptation of both the resource and people to the changing climate at costs that are bearable even for a desperately poor country like Nepal.

In terms of WRI's key themes (motivate, enable, implement), the community forestry approach creates strong motivation for Nepal's rural population through acknowledgement of their rights on forest lands and products, and enables them to manage forests in their vicinity sustainably while accessing micro-credits fulfilling their need for economic development. The chances of successful implementation are enhanced through the creation of local community organization CFUG that are made more effective by networking through FECOFUN.

In place Partly In place

Not in place

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Table 1. Summary of Forest Restoration Success

Theme	Feature	Key Success Factor	Response
	Benefits	Restoration generates economic benefits	*
		Restoration generates social benefits	*
		Restoration generates environmental benefits	*
NF / · · /	Awareness	Benefits of restoration are publicly communicated	*
Motivate		Opportunities for restoration are identified	*
	Crisis events	Crisis events are leveraged	*
	Legal requirements	Law requiring restoration exists	*
		Law requiring restoration is broadly understood and enforced	*
	Incentives	Projects/government offer incentives for tree planting	*
	Ecological conditions	Soil, water, climate, and fire conditions are suitable for restoration	*
		Plants and animals that can impede restoration are absent	×
		Native seeds, seedlings, or source populations are readily available	*
	Market conditions	Competing demands (e.g., food, fuel) for degraded forestlands are declining	×
		Value chains for products from restored forest exists	*
Enable	Policy conditions	Land and natural resource tenure is secure	*
Liable		Policies affecting restoration are aligned and streamlined	*
		Restrictions on clearing remaining natural forests exist	*
		Forest clearing restrictions are enforced	*
	Social conditions	is zoou people ale empowered to make devisions doou restoration	
		Local people are able to benefit from restoration	*
	Institutional	Roles and responsibilities for restoration are clearly defined	*
	conditions	Effective institutional coordination is in place	*
	Leadership	National and/or local restoration champions exist	*
		Sustained political commitment exists	*
	Knowledge	Restoration "know-how" relevant to candidate landscape exists	*
		Restoration "know-how" transferred via peers or extension services	*
Implement	Technical design	Restoration design is technically grounded and climate resilient	*
Imprement	Finance and	"Positive" incentives and funds for restoration outweigh "negative"	
	incentives	incentives for status quo	
		Incentives and funds are readily accessible	
	Feedback	Effective performance monitoring and evaluation system is in place	
		Early wins are communicated	*

Mitigation/Adaptation Assessment:

Nepal's community forestry is very strong in promoting adaptation of both the forests and the communities to climate change and is capable of imparting knowledge for reducing vulnerability to climate changes to the communities. One of the most vulnerable sections of Nepal's population has been trained in sustainable management of its forests taking care of the regeneration, maintenance and harvesting following scientific principles and protecting their forests against fires, insect attacks and diseases at bearable costs. It has also proved reasonably successful in protecting forests against deforestation in the middle hills even though success has been limited in high mountain ranges and low level Terai region.

Table 2. Summary of Mitigation and Adaptation Potential



Partly In place

Not in place

Mitigation/ Adaptation/ Transformation	Objective	Mechanism	Restoration Activity	Remarks
Mitigation	Sequester carbon	Increase community forestry area	Increased tree planting, improved protection against theft, fire, grazing	Yes
		Increase biomass/unit area	Increase productivity	Yes, but with limited success
			Increase functional diversity	Sometimes carried out for better market options
			Choice of species	This option is increasingly used now
		Increase soil carbon	Protection against soil erosion	Yes, but only when adequate funds are available for this costly activity
	Reduce emissions	Bioenergy	Careful extraction of wood for fuel	Yes, community forestry has been fairly successful in enforcing discipline is the removal of wood for fuel
Adaptation	Maintain forest area	Reduce deforestation drivers	Stop encroachment	Yes, highly successful in preventing encroachment
	Maintain carbon stocks	Reduce degradation	Improve community forest management	Yes
	Maintain other forest functions	Improve biodiversity	Increase diversity of tree species	Undertaken when it is a part of some government scheme
			Manage for increased biodiversity of wildlife	Partly, needs persuasion by forest department
		Improve hydrology	Restore microsites	Rarely, when adequate funds available for these costly measures
			Plant stream buffers	Yes, communities are sensitive towards protection of stream banks
	Manage for resistance	Reduce vulnerability to stressors	Integrated pest management	Not yet undertaken
		Genetically diverse seed sources		Not yet, opposition by NGOs noticed
		Reduce vulnerability by breeding, introduce new provenances, genetic modification	Low input breeding	Only being discussed at present
	Manage for resilience	Expand population (within range)	Use appropriate provenances of indigenous trees	Undertaken when initiative is taken by forest department
Transformation	Novel ecosystems	Selecting species and provenances for future climates	Low input breeding	Planned but not yet put into effect

	Create new community forestry systems	Replace species/provenances with desired functional traits	Planned but not yet put into effect
		Introduce exotics (non-native species) with desired functional traits	Rarely undertaken.

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